

Name: _____

p1106: Solve by factoring (v8)

1. Solve the equation

$$x^2 - 14x + 49 = 0$$

$$(x - 7)(x - 7) = 0$$

$$x = 7$$

$$x = 7$$

2. Solve the equation

$$x^2 + 9x + 18 = 0$$

$$(x + 3)(x + 6) = 0$$

$$x = -6$$

$$x = -3$$

3. Solve the equation

$$8x^2 - 4x - 69 = 7x^2 - 2x - 6$$

$$x^2 - 2x - 63 = 0$$

$$(x - 9)(x + 7) = 0$$

$$x = -7$$

$$x = 9$$

4. Solve the equation

$$6x^2 + 16x + 22 = 5x^2 + 6x - 3$$

$$x^2 + 10x + 25 = 0$$

$$(x + 5)(x + 5) = 0$$

$$x = -5$$

$$x = -5$$

5. Solve the equation

$$2x^2 - 14x + 27 = x^2 - 4x + 3$$

$$x^2 - 10x + 24 = 0$$

$$(x - 4)(x - 6) = 0$$

$$x = 6$$

$$x = 4$$

6. Solve the equation

$$3x^2 - 10x + 3 = 0$$

$$(3x - 1)(x - 3) = 0$$

$$x = 3$$

$$x = \frac{1}{3}$$

7. Solve the equation

$$7x^2 - 33x - 54 = 0$$

$$(7x + 9)(x - 6) = 0$$

$$x = 6$$

$$x = \frac{-9}{7}$$

8. Solve the equation

$$4x^2 + 27x + 33 = x^2 + 5x + 9$$

$$3x^2 + 22x + 24 = 0$$

$$(3x + 4)(x + 6) = 0$$

$$x = -6$$

$$x = \frac{-4}{3}$$

9. Solve the equation

$$16x^2 - 44x + 19 = 5x^2 - 6x + 4$$

$$11x^2 - 38x + 15 = 0$$

$$(11x - 5)(x - 3) = 0$$

$$x = 3$$

$$x = \frac{5}{11}$$

10. Solve the equation

$$15x^2 + 70x - 11 = 4x^2 + 7x + 7$$

$$11x^2 + 63x - 18 = 0$$

$$(11x - 3)(x + 6) = 0$$

$$x = -6$$

$$x = \frac{3}{11}$$